

Order 12690



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D5159-1

Job Sheet 188932



Part No: D5159-1

Job Qty: 8 pcs

Part Name: Rib



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/16/19

Job Tracking No:

Due Date: 1/19/19

Created By: Dara Macdonald

Type: SOLD

Description:

Note: DWG REV A IPP REV:A 14.10.03 NEW ISSUE DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
120	Conventional Mill - 1	8		1/19/19	0.00	10.96	Conventional Mill - 1		FRED 19-1-30
		pcs					Conventional Mill - 2		
130	QC 2	8		1/19/19	0.00	0.00	QC 2 - 1		FRED 19-1-30
		pcs					QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		19-01-31
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 38		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 54		
							QC 2 - 56		
							QC 2 - 57		
							QC 2 - 62		



1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S149523



Part: D5159-1

Job No: 188932

Serial No/Batch: S149523

Revision:

Inspector:

Exp Date:

Instructions: Various STC's

Date: 01/30/19

Plex 1/16/19 2:18 PM Dart.Macdonald.Dara

140 QC 8	8 pcs	1/19/19	0.00 0.00	QC 2 - 63	
				QC 2 - 8	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 38	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	2mm L
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
150 Powdercoat - 3 Grey Sand - B4B	8 pcs	1/19/19	0.00 0.16	QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				Powdercoat - 1 - B4B	
				Powdercoat - 2 - B4B	FEB 19-02-06
160 QC 3	8 pcs	1/19/19	0.00 0.00	Powdercoat - 3 - B4B	
				Powdercoat - 4 - B4B	
				QC 3 - 10	
				QC 3 - 13	
				QC 3 - 15	
				QC 3 - 17	
				QC 3 - 18	
				QC 3 - 2	
				QC 3 - 26	
				QC 3 - 28	
				QC 3 - 3	
				QC 3 - 30	
				QC 3 - 34	
				QC 3 - 36	
				QC 3 - 38	
				QC 3 - 41	
				QC 3 - 51	
				QC 3 - 58	
				QC 3 - 59	
170 Packaging 3-1 - Stock - B4B	8 pcs	1/19/19	0.00 0.00	QC 3 - 6	DAS
				QC 3 - 68	FEB 06 2019 68
				QC 3 - 9	9-89
				Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	DAS
				Packaging 3 - 3 - B4B	6
				Packaging 3 - 4 - B4B	FEB 07 2019
				Packaging 3 - 5 - B4B	3-89
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 -	

					B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
180	QC 21 - SA	8	1/19/19	0.00	0.00	QC 21 - SA - 21
		pcs				QC 21 - SA - 70

DAG FEB 07 2019
21
DAG FEB 07 2019

Part Op 120 - (Manufacture as per dwg) DRILL HOLES AND MILL ENDS AS PER DWG ***ENSURE MATERIAL SEAM IS AT
Descriptions: THE BOTTOM OF THE PART WHERE THERE IS NO HOLES***

130 - (QC2- Inspect parts off machine FAI/FAIB)
140 - (QC8- Inspect parts - second check)
150 - (Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3) START TIME: 11:00 TEMP: 320° FINISH: 11:30
160 - (QC3- Inspect Part Finish)
170 - (Identify as per dwg & Stock Location: _____)
180 - (QC21- Final Inspection - Work Order Release)

Scrap 4 ft (2 ft on each)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M304TS0.750W.049	304 Sq Tube .75X.75X.049W	9.8160 ft (1.227 ea) 9.920 1,240 ea	120-Conventional Mill - 1	5115491 5140974

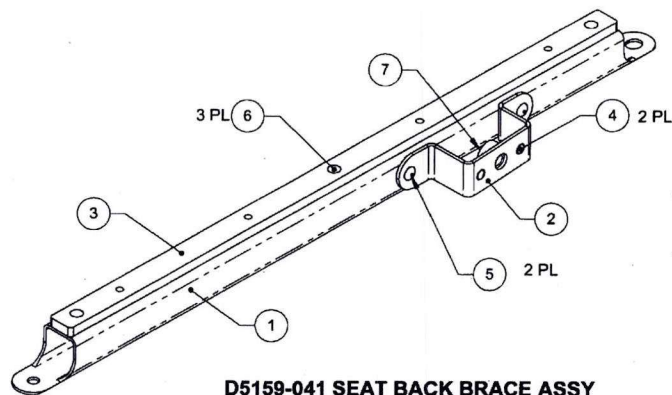
Job Allocations

Operation	Component Part	Required	Inventory	Allocated
120-Conventional Mill - 1	M304TS0.750W.049	10	601	0

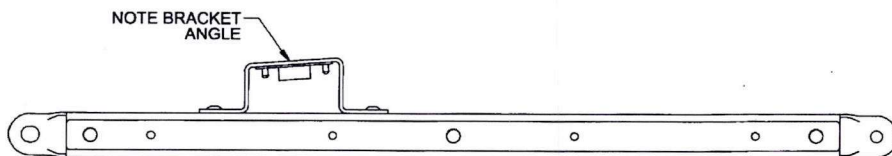
Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Rib	14.700Inches ± 0.030	14.730 14.670		
2	Rib	12.790Inches ± 0.030	12.820 12.760		
3	Rib	0.950Inches ± 0.010	0.960 0.940		
4	Rib	0.266Inches ± 0.010	0.276 0.256		
5	Rib	0.297Inches ± 0.010	0.307 0.287		
6	Rib	0.400Inches ± 0.030	0.430 0.370		
7	Rib	1.000Inches ± 0.010	1.010 0.990		
8	Rib	3.000Inches ± 0.010	3.010 2.990		
9	Rib	2.000Inches ± 0.010	2.010 1.990		
10	Rib	2.000Inches ± 0.010	2.010 1.990		
11	Rib	3.000Inches ± 0.010	3.010 2.990		
12	Rib	1.000Inches ± 0.010	1.010 0.990		
13	Rib	0.129Inches + 0.005 - 0.001	0.134 0.128		
14	Rib	2.440Inches ± 0.030	2.470 2.410		
15	Rib	2.625Inches ± 0.010	2.635 2.615		
16	Rib	0.129Inches + 0.005 - 0.001	0.134 0.128		
17	Rib	0.350Inches ± 0.030	0.380 0.320	Radius	

ITEM	QTY -041	P/N	DESCRIPTION
	X	D5159-041	SEAT BACK BRACE ASSY
1	1	D5159-1	RIB
2	1	D5160-1	SEAT BRACE BRACKET
3	1	D5160-5	SHIM
4	2	MS20426AD3-4	RIVET, SOLID, CSK
5	2	MS20600M4W3	RIVET, BLIND (MONEL)
6	3	MS20601M4W4	RIVET, BLIND, CSK (MONEL)
7	1	MS21059L4	NUTPLATE

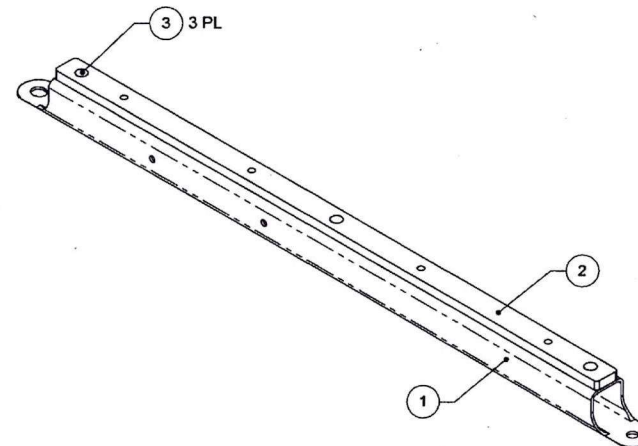


D5159-041 SEAT BACK BRACE ASSY



- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D5159-041" AND BATCH NUMBER BXXXXX PER QSI 044, 6.1.
 - 7) WEIGHT: 0.89 lbs

ITEM	QTY -043	P/N	DESCRIPTION
	X	D5159-043	SEAT BACK BRACE ASSY
1	1	D5159-1	RIB
2	1	D5160-5	SHIM
3	3	MS20601M4W4	RIVET, BLIND, CSK (MONEL)



D5159-043 SEAT BACK BRACE ASSY

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D5159-043" AND BATCH NUMBER BXXXXX PER QSI 044, 6.1.
 - 7) WEIGHT: 0.82 lbs

RELEASED

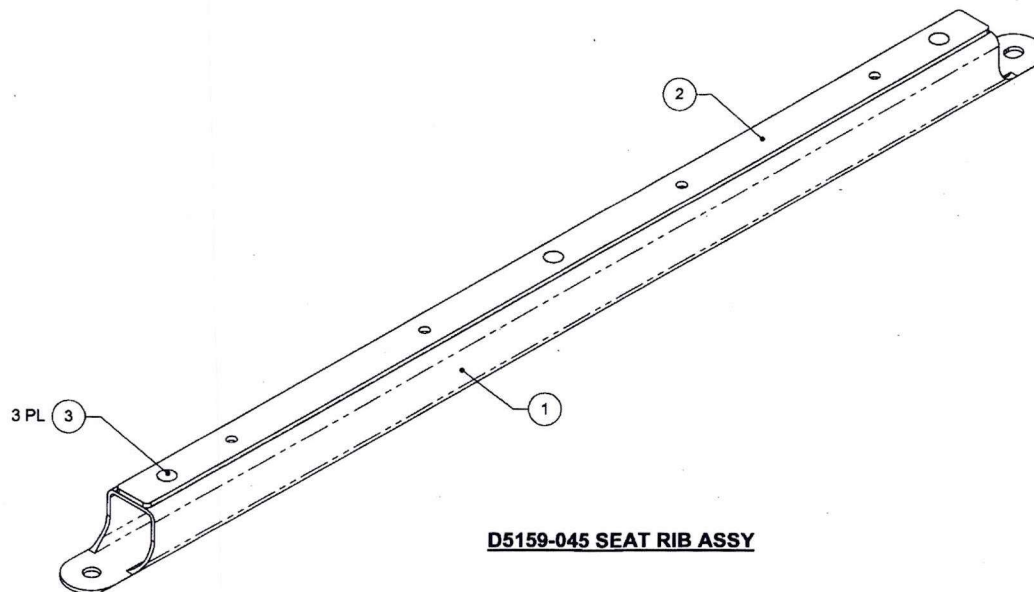
2015 FEB 04

ECN 15-522 4

APPROVED

A	NEW ISSUE	AJS	14.09.24
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. A
MFG. APPR.	DD	D5159	SHEET 1 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	SEAT BRACE ASSY	NTS
DATE	14.09.24	COPYRIGHT © 2014 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

ITEM	QTY	P/N	DESCRIPTION
	X	D5159-045	SEAT RIB ASSY
1	1	D5159-3	SEAT RIB
2	1	D5160-3	SHIM
3	3	MS20601M4W4	RIVET, BLIND, CSK (MONEL)



D5159-045 SEAT RIB ASSY

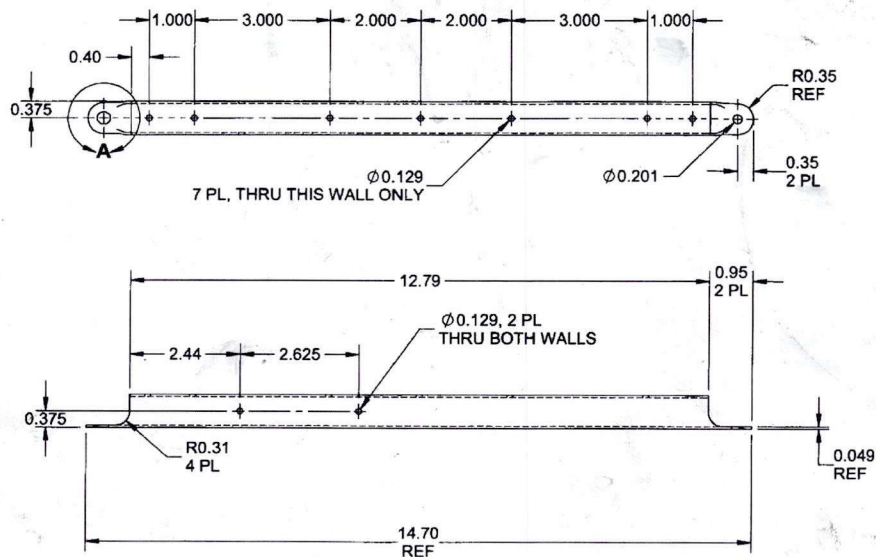
RELEASED
2015 FEB 04 *CP*

NOTES:

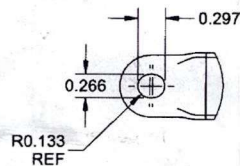
- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D5159-045" AND BATCH NUMBER BXXXXX
PER QSI 044, 6.1.
- 7) WEIGHT: 0.62 lbs

APPROVED

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	AP	DRAWING NO.	REV. A
MFG. APPR.	DD	D5159	SHEET 2 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	SEAT BRACE ASSY	NTS
DATE	14.09.24	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

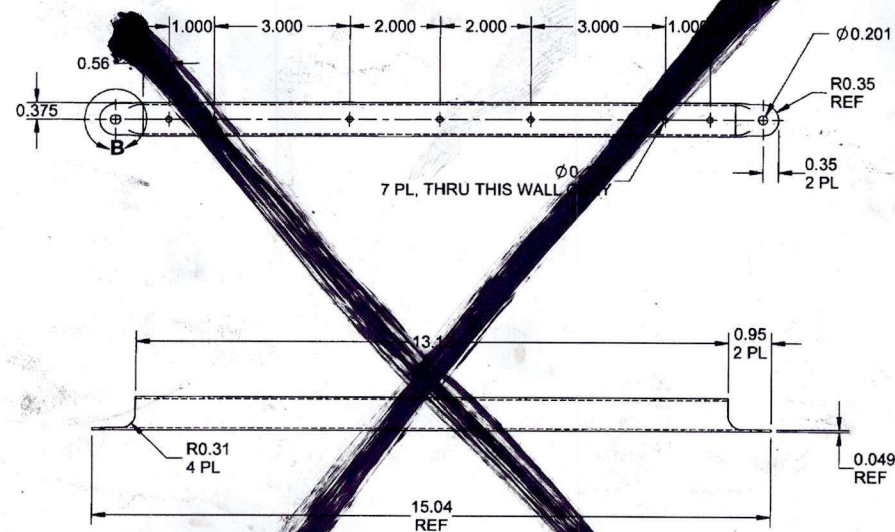


D5159-1 RIB

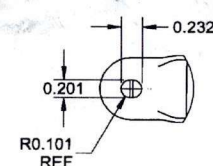


DETAIL A
SCALE 2X

- NOTES:**
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.049 WALL
PER ASTM A554/A269 MILL FINISH
REF DART SPEC. M304TS0.750W.049
 - 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT -1: 0.49 lbs
-3: 0.50 lbs



D5159-3 SEAT RIB



DETAIL B
SCALE 2X

RELEASED

2015 FEB 24

APPROVED

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. A
MFG. APPR.	DD	D5159	SHEET 3 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	SEAT BRACE ASSY	NTS
DATE	14.09.24	COPYRIGHT © 2014 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled		FAULT CATEGORY ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					